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Citation for published version:

Brooker, P, Barnett, J, Vines, J, Lawson, S, Feltwell, T, Long, K & Wood, G 2018, 'Researching with Twitter timeline data: A demonstration via “everyday” socio-political talk around welfare provision', *Big Data Society*, vol. 5, no. 1, pp. 1-13. <https://doi.org/10.1177/2053951718766624>

Digital Object Identifier (DOI):

[10.1177/2053951718766624](https://doi.org/10.1177/2053951718766624)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher's PDF, also known as Version of record

Published In:

Big Data Society

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Researching with Twitter timeline data: A demonstration via “everyday” socio- political talk around welfare provision

Big Data & Society
January–June 2018: 1–13
© The Author(s) 2018
DOI: 10.1177/2053951718766624
journals.sagepub.com/home/bds



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Abstract

Increasingly, social media platforms are understood by researchers to be valuable sites of politically-relevant discussions. However, analyses of social media data are typically undertaken by focusing on ‘snapshots’ of issues using query-keyword search strategies. This paper develops an alternative, less issue-based, mode of analysing Twitter data. It provides a framework for working qualitatively with longitudinally-oriented Twitter data (user-timelines), and uses an empirical case to consider the value and the challenges of doing so. Exploring how Twitter users place “everyday” talk around the socio-political issue of UK welfare provision, we draw on digital ethnography and narrative analysis techniques to analyse 25 user-timelines and identify three distinctions in users’ practices: users’ engagements with welfare as TV entertainment or as a socio-political concern; the degree of sustained engagement with said issues, and; the degree to which users’ tweeting practices around welfare were congruent with or in contrast to their other tweets. With this analytic orientation, we demonstrate how a longitudinal analysis of user-timelines provides rich resources that facilitate a more nuanced understanding of user engagement in everyday socio-political discussions online.

Keywords

Social media analytics, digital methods, digital ethnography, narrative analysis, socio-political issues, social welfare

Researchers have been quick to recognise the value of exploring how people use social media platforms to engage with socio-political issues, examining the role of micro-blogging platforms such as Twitter within the “Arab Spring” uprisings of 2011 (Bruns et al., 2013), the UK riots of 2011 (Proctor et al., 2013; Vis, 2013), and in general elections (Bastos et al., 2013). However, social media also provide a platform for *everyday* discussion of socio-political issues; discussions which demonstrate and reflect socio-political attitudes without explicitly contributing to or engaging with major political events (Brooker et al., 2015; Reeves and Brown, 2016; Rost et al., 2013; Sharma and Brooker, 2016). This paper develops a methodology for engaging with such everyday discussions, by attending to a longitudinally-oriented form of available Twitter data that is, as yet, underexplored – user-timelines.

We develop and demonstrate this methodology by way of advancing an empirical investigation of a selection of users engaged in the kinds of everyday discussions outlined above. One such discussion emerged on Twitter around a UK Channel 4 TV programme *Benefits Street* and its associated hashtag (#BenefitsStreet). The original broadcast run comprised six weekly episodes starting in January 2014, and documented the lives of residents of James Turner Street in Birmingham where, viewers were told, 95% of residents

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received unemployment and/or social welfare funding (commonly referred to in the UK as “benefits”).

The sociological interest in *Benefits Street* was instantaneous – e.g. Allen et al. (2014), Jensen (2014), MacDonald et al. (2014), largely due to *Benefits Street* bringing a key aspect of the contemporary British welfare state to the fore; namely, the relationship of mediatised cultural attitudes and political ideologies. The relationship between welfare politics and media is highlighted by Slater (2012), who notes various ways in which the Conservative Party – one of the two major UK political parties – and Conservative-affiliated think tanks such as the Centre for Social Justice manage (mis)information for the purposes of “manufacturing ignorance” (950). For Slater (2012), this is exemplified by the increasingly widespread proliferation of right-wing terms such as “Broken Britain”; the idea that supposedly ‘core’ British values (for instance, hard work as a virtue, the shamefulness of unemployment, etc.) have eroded and as such, people no longer feel a social responsibility to avoid claiming welfare benefits. Slater’s (2012) work shows how “Broken Britain” is a myth that has been leveraged to garner public acceptance and legitimisation of Draconian austerity policy measures, illuminating a clear link between ideology and media around welfare.

Investigating *Benefits Street* as a specific instance of precisely such discursive moves, Jensen (2014) takes up the idea of information management as central to the contemporary shaping of socio-political attitudes to welfare. Jensen notes that “2013 was the year when public debate about the welfare state apparently exploded – in the form of a new genre of television which has been tagged ‘poverty porn’” (2014: 1.1) – media which exploits conditions of poverty sufferers for entertainment. As with Slater (2012), Jensen (2014) acknowledges the mediatisation of welfare as tapping into a wider cultural shift where welfare is signified not as a social good but an unnecessary economic burden that is only reluctantly shouldered. The sociological response has centred on the *Benefits Street* as an example of ‘poverty porn’ that reflects this contemporary move in British social welfare, and which:

“aims to arouse and stimulate the viewer, to provoke an emotional sensation through a repetitive and affective encounter with the television screen. Poverty porn is an all-surface, no-depth visual culture of immediacy and its semiotic cues – its red flags of moral outrage – require no interpretive work from the viewer.” (Jensen, 2014: 3.1)

However, drawing on a Twitter dataset covering the usage of the #BenefitsStreet hashtag over the six-week period of the programme’s broadcast, Brooker et al.

(2015) locate and display the interpretive work viewers engage in around ‘poverty porn’. Despite its initial characterisation as superficial, Brooker et al. (2015) demonstrate that the #BenefitsStreet hashtag, as a conversation emerging around an instance of ‘poverty porn’ broadcasting, stands as *everyday* socio-political talk around a TV show and combines tweets about the show with wider discussions of the social issues signified by the events portrayed on-screen.

In light of this recognition of the capacity of Twitter to platform the performance of “everyday” socio-political talk, this paper contributes a methodological approach that pays particular regard to how such issues – ‘poverty porn’ and welfare provision as our example – permeate Twitter usage beyond the confines of a single hashtag or event. Social media analytics studies thus far have sought to capture and analyse data around a bounded topic (e.g. #BenefitsStreet) and this approach has provided clear research value (e.g. Brooker et al., 2015; Bastos et al., 2013; Bruns et al., 2013; Proctor et al., 2013; Vis, 2013). However, alternative methods of capturing and analysing data can be used to address different questions and provide different types of insight. This paper explores one such approach: using user-timelines. Timelines – chronologically-ordered comprehensive collections of single users’ social media output – are an almost-ubiquitous feature of social media platforms (including Twitter, Facebook, Instagram, Tumblr, Reddit, and more). However, the choice to base a research project on user-timeline data (rather than query keyword data), is more uncommon and confronts researchers with new methodological affordances and conceptual challenges.

We elucidate these challenges via a qualitative empirical investigation of how everyday socio-political discussion embeds within a Twitter user’s timeline. We concentrate on “everyday tweeters” and their responses to the socio-political issues instigated by everyday occurrences (such as TV programmes). We do not attempt to define what constitutes “an everyday tweeter” in a systematic and/or quantifiable way. Rather, we take the term “everyday” to refer to Twitter users who are not primarily motivated around any single topic – for the case presented here, welfare – but engage in socio-political discussion via interests featuring more generally in their online communication (e.g. TV shows). The work we undertake explores how socio-political issues extend beyond their everyday reportage via a single Twitter hashtag and are dispersed throughout users’ timelines. We analyse a selection of user-timelines in order to elicit insights around: the context within which users’ benefits-relevant tweets takes place in their broader Twitter timelines outside of the bounds of the *Benefits Street* conversation; the degree to which benefits-relevant issues pervade different users’

timelines alongside other interests, and; whether the attitudes represented in peoples' tweets on benefits and welfare issues were consistent with other discussions elsewhere in their timeline. We also aim to demonstrate a more general methodological point about the possibilities of leveraging user-timelines by attending to the ways in which user-timelines cut across multiple issues (as opposed to keyword or hashtag data searches which cannot).

Given these interests, we work towards two intertwining research objectives. First, to empirically explore, via an examination of user-timelines, what kinds of socio-politically-relevant Twitter talk exists around (but not necessarily within) a 'hot-topic' cultural discourse on welfare (i.e. '#BenefitsStreet'). Second, to methodologically reflect on the differences – affordances and limitations – between this approach and the event-based focus that is more commonplace in academic studies. To this end, the paper unfolds as follows. In the following section ("Background"), we provide overviews of two relevant (empirical and methodological) literatures: (1) the usage of social media in socio-political discussions and (2) selected qualitatively-oriented digital social science methodological strategies. We outline the practicalities of this study, and then present the findings of the work, discussing the methodological implications of these findings in terms of the capacity of user-timelines for "telling [the] social stories" (Murthy, 2008: 838) therein. Finally, we provide some concluding remarks, and point towards ways in which the two facets of the research – methodological and empirical – might be developed.

Background

Social media and socio-political issues

First we review empirical literature on the capacity for social media to host and facilitate socio-political discussion. Many approaches to citizen engagement with political issues are underpinned by Habermas' (1991) notion of the public sphere and its place within deliberative democracy (Elster, 1998). The public sphere comprises spaces within which citizens can engage in "critical public debate" (Habermas, 1991: 52) about issues of social import. Researchers have since brought these ideas up to date for 'the internet age', exploring the internet (and social media) as potential sites of democratic discussion (Pappacharissi, 2002; Shirky, 2011). However, researchers also express reservations around understandings of the internet and social media as open-to-all – e.g., Freelon et al. (2011) and Fuchs (2013) allude to Twitter's primary function as information-delivery (i.e. not a debating forum), and the asymmetric power distributions which persist online to ensure that informational content is primarily

influenced by privileged users (individuals, communities and/or corporations).

In light of these concerns, researchers have instead posited the internet and social media as a potential tool for facilitating a 'talkative electorate' involved in informal 'online deliberation' (Graham, 2015; Graham and Wright, 2014; Jackson et al., 2013; Pingree, 2009). Graham and Wright argue that "It is through ongoing participation in informal talk whereby citizens become aware of other opinions, discover the pressing issues of the day and develop and transform their preferences." (2014: 197). In this way, citizens using social media encounter various political standpoints, actively and passively, which help them situate their own (Graham, 2015). Hence, we might reformulate Pingree's contention that "Every [posted] message is a decision" (2009: 313) to suggest that every post provides an opportunity for users to develop their own socio-political standpoints.

These issues have become drivers for empirical studies – Semaan et al. (2014) investigate the use of multiple social media platforms in socio-political discussions, Vromen et al. (2015) analyse the role of social media in young peoples' political engagement, and Halpern and Gibbs (2013) study how The White House leverages Facebook and YouTube to initiate political conversations amongst followers. Despite a stereotype of brevity and superficiality, Halpern and Gibbs note that social media "nevertheless provides a deliberative space to discuss and encourage political participation, both directly and indirectly" (2013: 1166–1167). Studying political engagement in young people specifically, Vromen et al. (2015) note social media doesn't (only) amplify peoples' capacity for deliberation but "offer[s] young people more individualised and personalised ways of engaging with politics, as compared to what they are likely to encounter in more formal [i.e. 'offline'] settings" (2015: 81). Semaan et al. (2014) note the importance of a plurality of media content in facilitating socio-political discussion in ways that are dually shaped by "the characteristics and goals of the user and the affordances of the social media tools" (2014: 1418). Semaan et al.'s (2014) argument extends also to other media resources often used in tandem with social media around political discussions such as TV (cf. Brooker et al., 2015; Doughty et al., 2011). Hence, there is value in looking outside of the immediate event of a political discussion, to capture the ways in which socio-political issues are picked up, handled and articulated in social media users' everyday lives.

Research approaches for understanding user-timelines

Turning now to the second theme of our literary review – qualitatively-oriented digital social science

methodological strategies – we note that the focus of prior work in social media analytics has been the exploration of discrete social media events (e.g. Bastos et al., 2013; Bruns et al., 2013; Proctor et al., 2013; Vis, 2013) rather than the open-ended everyday chatter visible in timeline data. For example, Bruns et al.'s work on the usages of Twitter around the 2011 “Arab Spring” uprisings concentrates on “the relative levels of activity in Arabic, English, and mixed-language tweets featuring the #egypt and #libya hashtags” (2013: 872) tracked between January and November 2011. Thus, Bruns et al. (2013) provide insight into a tightly-bounded – topically and temporally – discrete ‘conversation’. Though we fully outline the differences between this approach and our own throughout the paper, we note for present purposes that the topically- and temporally-unbounded nature of user-timeline data, and the extent to which this data does not capture ‘conversations’, necessitates some methodological consideration. We also note that the outcome of the methodological consideration provided by this paper indicates that the analysis of user-timelines can provide a better understanding of how and why different users participate, in different ways, in everyday socio-political events and discussions on Twitter.

To engage with this form of data, we explore the opportunities afforded by digital ethnography and narrative analysis; qualitative analytic approaches premised on context-sensitivity and relating research subjects’ lives as they unfold over time. We do not aim to undertake a digital ethnographic narrative analysis of these data – as Hammersley and Atkinson note, “A first requirement of social research... is fidelity to the phenomena under study, not to any set of particular methodological principles” (1983: 6). Rather, our aim is to leverage these as starting points for probing the possibilities of user-timeline data.

Context-sensitivity is fundamental to any qualitative understanding of social behaviour, “yet it is not uniformly consulted or used in social analysis” (Holstein and Gubrium, 2007: 269), largely due to the difficulties in rendering a fixed description of an essentially processual phenomenon (Markham, 2004). Brooker et al. (2016) link context to different modes of data collection: data harvested via query keywords generates a fixed contextual boundary around the topic of choice, and user-timelines are better placed to capture social-media-usage-in-context. This is mirrored by Kotevko et al. who note that an analysis beginning with a set of concepts defined *a priori* “inevitably misses out on local interactional business that participants may attend to in online spaces” (2013: 76). Recognising the diversity of contexts within which social media usage occurs, Holstein and Gubrium recommend that

“researchers should be careful not to reify or ‘freeze’ it [context] into a static entity... [though] of course, it must be stopped in its tracks momentarily to allow for description and analysis” (Holstein and Gubrium, 2007: 279). Hence, an objective of this paper is to pursue a meaningful analysis of user-timeline data that acknowledges the situated contexts of the phenomena.

In order to do this, our approach is informed by (digital) ethnographic methods (cf. Hjorth et al., 2017; Pink et al., 2016) as tools premised on context-preservation (Kozinets, 2010). Ethnography – more typically understood as involving researcher’s direct participation within a physical setting – has recently been applied to online environments (e.g. Chretien et al., 2015; Gehl, 2016; Hjorth et al., 2017; Kulavuz-Onal and Vásquez, 2013). To illustrate the activity, we note that Gehl (2016) conducts a digital ethnography of the Dark Web Social Network, using the network himself, observing and speaking with other users about their practices, and reflecting on the lived experience of “the intersection between site architecture... [i.e. infrastructure]... and member actions” (2013: 1221) over a 10-month period. Similarly, Kulavuz-Onal and Vásquez (2013) conduct a digital ethnography of English language teachers in an online community (“Webheads in Action”), participating in community events, keeping records of emails from the community mailing list (as well as field notes and screenshots), and interviewing key members, over a 12-month period.

As Hallett and Barber note, the widespread embracement of the internet as a form of everyday communication ensures that “researchers need to reconceptualize what counts as a field site... studying a group of people in their “natural habitat” now includes their “online habitat.”” (2014: 308). Kozinets further notes “every interactive online posting is a social action... [which is]... a relevant observational event in and of itself.” (2010: 132). Hence, good ethnography consists of connecting social media user’s exchanges and interactions to their wider social situation.

Ethnography therefore has a natural and inevitable link with the idea of capturing and telling ‘stories’ with data: “An ethnography cannot give us a glimpse of reality that resides beyond the story told within the ethnography; the story is all.” (Kent, 1993: 67). In this way, the digital ethnographer’s role becomes to capture and tell/re-tell the stories of their online ‘subjects’ (Murthy, 2008). Narrative analysis provides an apposite lens through which ethnographically-amenable digital data might be viewed (cf. Chou et al., 2011; Georgakopoulou, 2014; Tangherlini et al., 2016). Lawler (2002) notes that narrative analysis

focuses on peoples' usages of stories to interpret the world:

"we all tell stories about our lives, both to ourselves and to others; and it is through such stories that we make sense of the world, of our relationship to that world, and of the relationship between ourselves and other selves ... Stories, or narratives, are a means by which people make sense of, understand and live their lives." (Lawler, 2002: 249)

Given such stories do not necessarily transmit facts 'objectively', the analyst's interest does not depend on a story's approximation to truth. Rather, narrative analysis orients to how stories are retrospectively told in ways that provide insight into the people and worlds those stories are about. Though many varieties of narrative analysis perpetuate, two are particularly relevant to social media analytics. First, Plummer's (1995) "sociology of stories", which focuses on the use of data to elicit insights around the cultural, historical and political contexts in which particular stories are told. Second, Bruner's (1991) "functional" approach, which advocates an orientation to the work that particular stories do in peoples' lives (e.g. what social media users invoke stories to achieve).

Narrative analysis holds that stories are textual or told, they display character progression, and they demonstrate the artful structuring of narrative elements. Georgakopoulou (2017) extends narrative analysis to social media, which, she argues, constitute 'small stories' that demonstrate:

"a set of features that conventional narrative analysts would see as atypical or non-canonical ... These features involve fragmentation and open-endedness of stories, exceeding the confines of a single posting and site and resisting a neat categorization of beginning-middle-end ... In addition, there is a tendency for reporting mundane, ordinary and in some cases, trivial events from the poster's everyday life." (Georgakopoulou, 2017: 268)

Like digital ethnography, the application of narrative analysis to social media data is an underdeveloped area. This justifies our jointly empirical-methodological focus, seeking as we do to develop an appropriate methodology for a new social media analytics data-type (i.e. user-timeline data), and demonstrate that methodology through the course of an empirical project (i.e. investigating how socio-political issues are embedded within user-timelines). The ways in which we draw on digital ethnography and narrative analysis in our methodology for handling user-timeline data is form part of the discussion of the following section.

Research approach

Our interest is in the use of timeline data to interrogate users' socio-political attitudes over time, anchored by two points which we might reasonably expect them to engage in those discussions (i.e. around the two series of *Benefits Street*). Using Chorus (www.chorusanalytics.co.uk)¹ we collected usages of the hashtag "#BenefitsStreet" during the broadcast of the first series of *Benefits Street* (originally broadcast in January 2014). We identified and captured a total of 3,129 users tweeting using the "#BenefitsStreet" hashtag around the broadcast of episodes of the first series of the program. We used this hashtag data to identify tweeters who were active in the Twitter conversation around "#BenefitsStreet" during the first series (January 2014) and who remained active tweeters during and after the time of broadcast of the second series (the series was broadcast in May 2015, data was collected to October 2015). The inclusion criterion for our user-base – users who engaged with the #BenefitsStreet hashtag during the initial run of series one and who continued to use Twitter beyond that finite event – belies the qualitative orientation of the research. We do not claim that our user-base constitutes a 'sample' from which wider generalisations might be made from a quantitative perspective. Rather, we intend only to locate and explore the rich and meaningful aspects of the content produced by the user-base qualitatively. Chiefly, this is to be done via an analysis of users' timelines (drawing on the decidedly qualitative analytic frameworks of digital ethnography and narrative analysis), rather than the more event-based analyses that are commonplace in social media analytics.

To locate the timelines of "everyday tweeters" – Twitter users who had no specific agenda – within the remaining corpus, we computed an average 'tweets-per-day' for each user then fitted these to a normal distribution, removing all accounts (548 in total) lying outside of the upper bound of one standard deviation of the mean (mean = 16.88 tweets-per-day, 1SD = 45.25 tweets-per-day). This was done since those with an exceptionally high average tweets-per-day count were less likely to be the "everyday tweeters" of interest, and more likely to be spam bots or marketing accounts. We also removed users whose metadata indicated that they may have deactivated and reactivated their accounts after the initial broadcast of *Benefits Street* – these account names could no longer be associated with the content captured around the first series of *Benefits Street*. Hence, their removal was necessary for analytic reasons, as well as ethically (i.e. removing access to data which users have chosen to rescind – cf. British Psychological Society, 2013; Markham and

Buchanan, 2012, 2015, 2017). The remaining user-timelines were scraped backwards from October 2015 (i.e. the start point of the data collection), through the broadcast period of the second series of *Benefits Street* (May 2015), and back to 1 January 2014 (i.e. before the initial broadcast of the first series of *Benefits Street*).² The resulting user-timeline dataset comprised 2,581 user-timelines yielding 1,398,948 tweets in total. Our analysis explores 25 user-timelines (53,284 tweets total), randomly selected³ from the master dataset for a ‘close reading’ (see below for detail).

The move from 2,581 user-timelines (1,398,948 tweets total) to a random selection of 25 user-timelines (53,284 tweets total) is considerable. The choice to limit the analysis to a small number of user-timelines was taken to keep the analytic work manageable; especially important since the analysis was developed alongside a developing methodology. The choice to analyse 25 timelines specifically was for reasons of thematic saturation (i.e. there had been diminishing returns in terms of new themes and insights yielded from incorporating extra timelines). Though 25 users could be selected from searching the Twitter website for mentions of ‘#BenefitsStreet’ without the effort of the filtering process described above, this was done for two reasons. Firstly, in collecting and refining the data thusly, we have attuned ourselves more closely to the ‘everyday tweeters’ we aim to study – chiefly, by exploring the data to understand better what constitutes an average tweets-per-day count local to the dataset. Secondly, we did not rely on Twitter’s algorithms to present us with candidate user-timelines to follow – instead, we filtered the data as described to retain accountability for the selection process. What we expect to capture in these user-timelines – reasonably, given the filtering process – is the sense in which socio-political ideas around welfare fit with users’ reportage of their everyday lives across a period before, during, and after the broadcast of the two series’ of *Benefits Street*.

This aspect of our methodology responds to a tendency within social media analytics to think about social media as facilitating explorations of large datasets (e.g. Bastos et al., 2013; Bruns et al., 2013; Proctor et al., 2013; Vis, 2013). However, more recently, social scientists have worked with smaller collections where the emphasis has been less on providing aggregate views of social interaction, and more on exploring such data through a critical, qualitative and interpretive lens (e.g. Bingham-Hall and Law, 2015; Cassidy, 2016; Foucault Welles, 2014; Gonzalez-Polledo, 2016; McArthur and Farley White, 2016; Massanari, 2017). The methodological aspects of our work are aligned with these latter studies inasmuch as we aim to do two things. First, in the face of vast swathes of

freely-available data, we want to demonstrate the potential rewards yielded by resisting the temptation to ‘go large’. Second, we want to provide a strategy with which researchers might navigate past the ‘Bigness’ of social media data to tell the stories captured within them and to tap into these data as unique experiential accounts.

To assist us in doing so, we have stated our intentions to take digital ethnography and narrative analysis as methodological starting points to enable ‘close readings’ of the data at hand. We take digital ethnography and narrative analysis as starting points in several ways. Chiefly, our study reflects, longitudinally, the open-ended usage practices of Twitter users, depicting these practices via the stories that people tell online in a way that is attentive to the contexts within which those practices and stories take place. However, our work also departs from digital ethnography and narrative analysis in several significant areas. For instance, unlike the digital ethnographies of Gehl (2016) and Kulavuz-Onal and Vásquez (2013) outlined above, we have not spent months participating in the conversations captured by the data, or speaking directly to those who have (though of course, we appreciate the value in this different research direction). We also recognise, along with Georgakopoulou (2017), that the stories that are narrated on Twitter are not conventional narrative analysis materials. Instead, we draw on user-timeline data as a way to capture the longitudinal and unfolding nature of users’ Twitter stories, and treat peoples’ tweet outputs not as stories that reflect their lives generally but are more specific to the context of Twitter. Moreover, some users’ tweeting practices around certain issues (e.g. benefits) are incongruous with the rest of their timelines, suggesting that it may be overly reductive to pin a depiction of a user strongly to a specified tweeting practice (see findings section for fuller detail). Hence, the data for which we are developing a methodology to handle requires support that digital ethnography and narrative analysis can offer, but only in part. As such, we do not pitch this study as falling neatly within either approach, though draw on some core principles of digital ethnography and narrative analysis to provoke and kickstart our methodological thinking.

With these distinctions in mind, practically, the work of undertaking ‘close readings’ of the data at hand involves treating data less in terms of counting and/or coding tweets except in the very loosest of terms, and instead attempting to understand and re-tell the social stories (cf. Murthy, 2008) contained therein, as an ethnographer might handle their observations in their analyses. The possibility of telling such stories relies on the sequential and longitudinal nature of user-timeline data, which helps us situate tweets within the broader contexts of users’ experiences, interests and motivations

as reported on Twitter. This is what we term ‘a close reading’: organising available data into a format where the unfolding sequential order of tweets can be attended to, then reading through a user’s timeline to understand what each user is using Twitter to do, being especially attentive to aspects that illuminate users’ engagements with benefits as a socio-political issue. Based on these ‘close readings’, we have drawn out a collection of users’ ‘tweeting-practices-in-context’, which we demonstrate by reference to selected illustrative episodes from users’ timelines where those practices are most clearly on display (see “Findings and Discussion” section).

All data has been collected and analysed in line with academic internet research ethical standards (British Psychological Society, 2013; Markham and Buchanan, 2012, 2015, 2017). Of chief concern for this research, we have anonymised and paraphrased tweets to prevent their recoverability through search engines and ensure users’ anonymity. All paraphrased usernames (excepting those of verified celebrities which tweeters may refer to in their tweets) are unused at the time of writing.

Findings and discussion

Though the aim of the research has been to elicit the unique social stories captured in user-timelines (especially the aspects of those stories relevant to benefits), our interest in everyday socio-political discussion enables us to reflect on tweeting-practices-in-context shared by users across multiple timelines. These shared practices include: the status of benefits as TV entertainment or a social issue; the extent to which users submersed themselves in (or dipped-in-and-out-of) socio-political issues, and; the degree of congruency in users’ tweets about benefits and their other tweets. These are not designed to be read as ‘themes’ for categorising users, but are commented on as tweeting-practices-in-context which capture something of the fluidity of user-timeline data without transforming these into static categories. We are, inevitably, limited in terms of the possibilities of representing these collections of experiences as ‘results’. In this regard, we elect to demonstrate analytic insights by presenting curated selections of tweets from user-timelines as exemplars. In this way, we hope to depict the ‘small stories’ (Georgakopoulou, 2017) present in the data, by referring to excerpted episodes that are illustrative of broader practices visible in multiple users’ timelines.

Benefits as TV entertainment vs. benefits as social-political issue

We began the analysis looking explicitly at tweets posted around the time of broadcast of the two series’ of *Benefits Street*. Though this was done to provide a

platform on which to build further analysis, the tweets around these points proved useful in contextualising how users engaged with welfare differently. One distinction between users was their positioning of benefits claimants and their lifestyles as a source of TV entertainment or as a wider socio-political issue. Some users made repeated comments throughout their timelines on different TV shows – these were not always benefits-related programmes, but were typically popular UK programmes such as *The X-Factor* and *Celebrity Big Brother*. For these users, benefits as an issue was, foremost, one topic of TV viewing amongst others; their tweets reflected this. Users orienting to benefits primarily as a topic of TV entertainment also typically demonstrated negative opinions of benefits-related TV shows (and TV shows generally). Moreover, these tweets did not demonstrate a consideration of the motives of the producers of such shows, nor the ways in which welfare issues intersect with wider socio-political issues. For instance, @KayleighCherry produced the following three tweets in quick succession:

It’s amazing how the houses on #benefitsstreet are so dirty – they’ve got nothing else to do all day, can’t they clean up??? #boneidle #scroungers

Luisa’s squeaky voice is REALLY grating on me! #irritatingbitch #CBB

Can’t help but think that the people on #weightlossward just need to get a grip and go to the fucking gym! #lazy

Another user, @TheNotoriousDAN88, who tweets primarily about football and TV, maintains a consistently negative outlook on the programmes he watches:

I’d LOVE to find out what the mothers of Fungi’s kids look like #properscroted #benefitsstreet

Lucy Beale absolutely nailing the “Lord of the Rings” look on Eastenders tonight! #jesuswept

Get some shoes on, you arsehoole! #Eurovision SongContest2014

For users like these, negative opinions on welfare were entangled more with TV entertainment than with wider socio-political contexts. Other users’ timelines are more explicitly oriented to political issues including welfare and benefits. These users’ engagements with benefits is, foremost, as a socio-political issue rather than a topic of TV programming. Issues pertaining to benefits are reported across multiple contexts throughout these user-timelines. Hence, these users demonstrate an orientation to benefits as primarily a socio-political issue which is, sometimes, realised through TV media. For instance, @RedworthCentre, tweeting as a

representative of a community support centre, uses Twitter to highlight the following content in support of welfare claimants and in reaction to Benefits Street:

RT @RoughDiamondBlogger: It's exaggerated, it doesn't represent us, and it demonises us: Here's an alternative to #benefitsstreet: [URL]

RT @LocalLadMalc: RT @RoughDiamondBlogger: After bills, I'm on £15 a week. I'm blogging about the real non-C4 life on benefits: [URL]

RT @YourAdviceHub: Mental health issues are compounded by unnecessary problems and delays in benefits payments: [URL] #BetterMentalHealthCareNow

Not all users who treat benefits as primarily a socio-political issue are supportive of the UK welfare system – for instance, @piggy_in tweets in response to a range of televised representations of benefits:

RT @FairyLynnMama: Give us a cheer if ur watching #BenefitsStreet and feeling like you made the right choice not voting Labour last time

RT @BBC_is_Bullshit: Youth on benefits shouldn't be given housing, they should live with their parents like those not on benefits do. #QuestionTime

RT @DustinHydrate: Why are we given benefits figures including pensions? Don't do that. We're OK with elderly getting pensions. #BenefitsDebate

Hence, users display marked differences in regard to how they orient to welfare, with some users commenting primarily on benefits as a topic of TV entertainment and others featuring talk about benefits more widely throughout their Twitter feed (i.e. about other benefits-related TV shows or outside of the context of TV altogether). Though users engaging with the socio-political aspects of welfare do not always tweet in support of welfare claimants (and those who are represented in TV shows like Benefits Street), we might nonetheless argue that they demonstrate a deeper and more 'critical' attempt to connect benefits-related issues to wider society. Thinking methodologically, this finding is made visible by virtue of users connecting their treatments of welfare to other topics in different ways. Hence, a keyword-search method results in a picture of Twitter conversation where all users are engaged equally with the topic at hand (by virtue of assuming the selected keyword, e.g. #BenefitsStreet, is interpreted and treated uniformly by users). In contrast, user-timeline data helps furnish an analysis with a sense of *what* and *how* Twitter users think about welfare beyond the confines of a singular issue and/or event such as a conversation around 'poverty porn' programming (though using such

a conversation as a 'jumping-off point' for locating user-timelines of interest).

Selves in action: Submersing-in vs. dipping-in-and-out of politics

In analysing the data, distinctions between users became clear around the degree to which political issues pervade a timeline generally. Some use Twitter almost exclusively for discussing, disseminating, and doing politics. For instance, @PinkoFizz (whose biography lists her as a researcher, lecturer, socialist and trade unionist) timeline primarily comprises tweets about socio-political issues:

Boris Johnson has closed ten fire stations in London today #disgraceful #postolympiclegacy #shameonyou #hedoesntworkforus

RT @research_foundation: New research shows the widening gap between people dying before 65 in deprived and affluent areas #healthissocial

RT @VoidEnv: Reckon Channel 4 will do a 'documentary' about the #taxdodgers who cost the state 35 billion? #benefitsstreet

@_danny_hunter's timeline has a similar centrality around socio-political content:

Poorer areas of #Eng and #Scot are subject to larger local government budget cuts [URL]

My response to this article: cutting community/youth centres and other public amenities won't help, will it? #BrokenClassSystem #BenefitsStreet #SocialInequality [URL]

RT @planetpreservers: Today is Earth Day, and it's never been more important to create sustainable communities #GreenLiving @EarthDayFriends

Whereas the above users use Twitter explicitly as a tool for political discussion, other users demonstrate a more casual approach to politics and Twitter; they 'dip-in-and-out' of socio-political issues around widely-publicised current affairs events (here, this includes the 2015 UK general election and various news articles related to Nigel Farage; ex-leader of the far-right UK Independence Party). For these users, socio-political talk is spread more thinly and features only sporadically throughout their timelines. For instance, @tinysaimah's timeline is oriented primarily to everyday personal reportage (including such things as TV watching), within which the occasional socio-political tweet features:

The heat makes me SO sleepy ... apart from when it's time for bed :-/

Are the EDL still around? I should know this #CouldntGiveATossActually

RT @MuslimNews_Updates: Muslim UK aid worker killed by Israeli airstrike in Rafah. @David_Cameron what are you doing about this?

Another similar user is @HelenAstridT; a lifestyle blogger/journalist tweeting about ‘pop culture’, her personal life (including her upcoming marriage) and how those topics intersect with feminism:

Absolutely devvo’d to be missing the @lenadunham and @caitlinmoran thing tonight. The two together in one room is like the feminist epicentre.

I basically want my wedding to look like Blake Lively’s baby shower ... if I ask her nice will she help me out? [URL]

International Women’s Day 2014 is a perfect reason to blog about why I’m a feminist #IWD2014 [URL]

Though @HelenAstridT is explicitly orienting to feminism as a political standpoint she is doing so in a more ‘everyday’ (i.e. less linked to welfare as a wider social issue) way than @PinkoFizz and @_danny_hunter, by exploring those ideas in relation to her personal thoughts and feelings (i.e. via self-reflective blog posts and celebrity news). This is not to say that @HelenAstridT’s (and @tinysaimah’s) political expressions on Twitter should be taken less seriously, but that they are made visible through markedly different tweeting practices than those undertaken by @PinkoFizz and @_danny_hunter. Though the affordances of Twitter are the same for all users, there are multiple ways in which the platform can be artfully used to develop and express an online identity through which users tell their social stories. The extent to which users’ timelines converge around politics as a single issue or as one interest amongst others can be drawn on as a way to attend to which social stories a user wishes to tell and what importance those stories may have in their lives more generally. Moreover, these social stories are only rendered visible when also taking account of the context that surrounds users’ engagement with socio-political issues – the other things that users tweet about, and how politics fits into their timelines alongside other topics of interest.

Congruency vs. contrasts of benefits tweets with general tweeting practices

Users’ timelines also demonstrated different tweeting practices signifying how specific users relate to benefits and welfare when they are discussed. Though some

tweets using the #BenefitsStreet hashtag displayed offensive and provocative reactions to the programme and the people featured therein, these inflammatory tweets were, in some cases, tempered by virtue of their being situated within broader timelines of content unrelated to benefits yet just as inflammatory. Such tweets were not necessarily intended to cause offense or even display particularly strong reactions to the events and people of Benefits Street. For instance, @Grrrrimmmmyyy made hostile diatribes about Benefits Street as they were watching it, yet we find that this blunt, aggressive talk is an ‘in-joke’ they share with their Twitter friends in normal conversation:

[About Benefits Street] @x_d_barry_x Sorry lad, but I swear I’m going to burn that fucking street to the ground, I can’t stand any of the motherfuckers on that show!

@cleobelledennis [a friend with whom @Grrrrimmmmyyy regularly tweets] fuck you too :-)

@THE_Charly_Jones [a friend with whom @Grrrrimmmmyyy regularly tweets] fuck you, talking like Liam Gallagher when you’re from down South, you loser!

Another tweeter, (@Jon_Hazel85), tweets mainly about sport and television, in ways which primarily express irritation and boredom about the topic at hand. Hence, it is difficult to argue that his apparent annoyance at Benefits Street advances any particularly strong socio-political comment, when seen within the context of what he tweets about other TV shows and events:

Watching this #BenefitsBritain show, but dunno why because I’m just gonna get tetchy and turn it off after 5 minutes like I do with all the others!

Can’t be arsed with that Britain’s Got Talent

Every year I watch the super bowl, get wound up at all the adverts and how I can’t follow the game...and this evening I shall be doing exactly the same!

However, not all users demonstrated a congruency between talk about benefits and their Twitter timelines more generally. For some, benefits and welfare elicited a change in the tone of their tweeting. These contradictions in tweeting practices around benefits-related content often demonstrated a markedly increased positive or negative opinion of benefits claimants. For instance, @TonyPlatt92 tweeted primarily about TV shows and sport, and made off-hand derogatory jokes about people in the first series of Benefits Street that indicate a treatment of the program as a piece of TV entertainment

rather than social commentary. However, further into his timeline, he begins to tweet much more sympathetically and strongly about welfare claimants and the social situations surrounding the welfare debate (an example of both types of tweeting follows):

RT @TSBible: Twins! #BenefitsStreet [URL to image comparing the faces of sports commentator Adrian Chiles and a person featuring on Benefits Street]

Who cast White Dee [one of the main ‘characters’ of Benefits Street] as the butch lezzie in orange is the new black?

@GPickard86 [a tweeter previously unknown to @TonyPlatt92 and who engages in a lengthy argument about welfare] Mate, the lives they lead on that money are pitiful. They don’t take anywhere near the money that London bankers are getting away with #lookattherealproblem

@GPickard86 ... yes, and that’s exactly what Rupert Murdoch wants you to see. Think about what you’re being shown mate!

Another tweeter, @TBirdTaz, tweets mostly about reality TV and to various companies’ customer service accounts about problems with products and services (e.g. his Xbox console, home internet provision). @TBirdTaz’ responses to benefits-related issues are contradictory, switching between derogatory and sympathetic, and his timeline becomes increasingly politically-oriented and more positive about welfare claimants and their unfair representation in the media around the time of the 2015 UK general election:

So they have money for drugs and drink but they can’t afford soap for their dirty kids? #BenefitsStreet #prioritise

Reckon the narrator on Benefits Britain knows that her patronising tone is fostering more hatred for welfare claimants?

The more I see of UKIP on TV, the more I get the impression that they have opinions about anything and everything, but actual policies on very few things #bbcqt

Hence, there are distinctions in the degree to which users’ timelines demonstrate congruent or contradictory opinions on welfare as a socio-political issue. However, as representations of narratives-in-development, Twitter timelines *do not have to be* consistent, and nor are people policed for inconsistency. This point is neglected entirely when considering only the flashpoints around which users engage pointedly (though likely also briefly) with

a socio-political issue (i.e. where congruency is assured by virtue of searching for a finite set of keywords). Considering how an issue such as benefits might be discussed similarly or differently across a users’ Twitter timeline allows us to think about how social media are increasingly used as spaces for socio-political discussion in ways which diverge from the carefully-considered content that is expected and advocated in literature around online deliberation (e.g. Pingree, 2009).

Conclusion

In line with the research objectives stated at the outset, this paper makes two contributions. First, we elucidate a methodological approach to timeline data. This is achieved via our second contribution; an empirical demonstration of “everyday” socio-political talk around UK welfare provision which attends to the inherently mediated aspects of such issues in their contemporary form (cf. Jensen, 2014; Slater, 2012). We depict how users make varying use of Twitter to engage in socio-political discussions around benefits, by situating those discussions within the wider contexts of their tweeting practices. This has helped us understand how users pick up and handle socio-political issues in various ways within the broader contexts of their everyday lives and social media usage: benefits are discussed as a topic that provides entertainment or that is to be taken seriously; as converging around an event (such as a TV show) or as more fundamental to their online identities, and; as adhering to or aberrating from their typical tweeting practices. As our work suggests, the hopes that social media provide a Habermasian ‘public sphere’ for hosting formal debates fail to acknowledge how people already engage with socio-political issues online. We have undertaken an empirical project which elucidates how such practices operate ‘on the ground’, and which also demonstrates a means of tapping into the richness of this content.

Turning focus to our methodological motivations, we reflect on what it has been possible to explore with user-timelines that would have been precluded with keyword or hashtag data collection. This has been explored above in regard to several studies (e.g. Bastos et al., 2013; Bruns et al., 2013; Proctor et al., 2013; Vis, 2013), but to exemplify the distinction with specific reference to other work on Twitter, ‘poverty porn’ and *Benefits Street*, Brooker et al.’s (2015) work on data collected via the hashtag ‘#BenefitsStreet’ captures the sense in which the programme served as a hub around which socio-political discussion congregated. The present paper, based on user-timeline data around the same topic, aimed instead to explore how socio-political issues are thought about beyond and outside of the context of a single TV show and

exemplified in Twitter users' tweets more generally. To this end, we comment on a series of tweeting-practices-in-context which contribute to this methodological interest, allowing us to think more clearly about a number of questions: What *else* do users tweet about beyond a single issue of analytic interest (e.g. benefits) and how important is that issue in their lives? How does online talk about an issue feature as part of the display of a broader online identity? How do attitudes around an issue stay static or shift as people are in the process of working those attitudes out? Using user-timelines to answer such questions helps us understand the everyday usage of social media as spaces where socio-political content is shared, and how and why users are motivated to use social media platforms in this way. We advocate such an approach to help researchers go beyond a focus on the 'one-off' contributions users might make to such conversations via the kinds of hashtags and/or keywords that researchers more commonly draw on (and which serve to temporally and topically bound an analysis).

Our own work draws on digital ethnography and narrative analysis in order to do so. We do not commit to these methods strongly, but use them as starting points for developing an analysis. Our usage of digital ethnographic ideas (e.g. Chretien et al., 2015; Gehl, 2016; Hjorth et al., 2017; Kulavuz-Onal and Vasquez, 2013; Pink et al., 2016) helps us retain the context of the social interactions performed within Twitter timelines. As with (digital) ethnography, the researcher must approach user-timeline data inquisitively and be willing to follow up topics and practices occurring in parallel with a user's timeline but which extend beyond it (e.g. topics not locatable via keywords directly related to the research question, conversations between users, or discussions around URLs linking to resources outside of Twitter).⁴ This being said, our work is not ethnography in the strictest sense, primarily because as researchers we were not present at the time 'the action' (i.e. users populating their timelines with tweets) occurs and nor do we have the direct access to these users that ethnographies usually permit (inasmuch as we rely only on the Twitter timeline as a historical/retrospective document). Nonetheless, the attunement to context that digital ethnography advocates is a valuable resource in terms of generating deep insights around users' socio-political stances on benefits. Similarly we note that narrative analysis as applied to digital data (e.g. Chou et al., 2011; Georgakopoulou, 2014; Tangherlini et al., 2016) has helped us investigate social media as spaces where people tell stories about themselves; stories which are designed, considered, rationalised and situated in regard to those who may read them (i.e. other Twitter users). However, it is critical that we also remember that the stories people may

'tell' on Twitter are not polished, finished or cohesive, but are in the process of being sketched-out and drafted, scribbled on, appended to, redacted, and so on. This take on narrative analysis is, we argue, much better suited towards social media usage as it is done within the broader contexts of everyday life.

Thinking now about how the work we have presented above might be applied and extended further, we consider how the methods deployed might feature in social media analytics' methodological toolkit more generally. We reduced our analysable corpus to 25 user-timelines; this is appropriate for probing a hitherto underexplored type of data. Moreover, given the depth of insight these methods have afforded, we note that you do not *need* to extend the scope of research involving user-timeline data in order to derive meaningful insights; 'small data' is appropriate for analyses aiming towards descriptive depth rather than explanatory breadth. In this sense, future researchers aiming to draw on user-timeline data in a way similar to that outlined above may find that having appropriately filtered the data down to a body of users-of-interest, thematic saturation can be approximated with a relatively small selection of user-timelines. For these researchers, we hope to have shown the value in pursuing such an approach, by demonstrating how and why the analysis of user-timelines offers differently-valuable forms of insight than the 'standard' query keyword approach to data can provide.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: the Research Councils UK project ES/M003574/1 "CuRatOR: Challenging online fear And OtherRing", funded by the UK cross-council programmes: Partnership for Conflict, Crime and Security Research (Economic and Social Research Council), Connected Communities (Arts & Humanities Research Council), Digital Economy (Engineering and Physical Sciences Research Council), in partnership with: Dstl and CPNI.

Notes

1. Chorus harvests tweet data using "GET/search/tweets", and "GET/statuses/user_timeline" for user-timelines. See <https://dev.twitter.com/rest/public> for details.
2. At the time of the research, Twitter restricted the harvesting of more than the last 3,200 of a user's tweets. Hence, at this point, due to the potential differences between a user's average-tweet-per-day count and their actual tweet frequency for the selected period, it was not possible to collect

all remaining user-timelines back to January 2014. Users whose tweets during the selected period exceeded 3,200 were removed.

3. This was achieved via a Python script to generate a randomly-selected list of 25 unique usernames from all remaining usernames of tweeters.
4. Though we have attended solely to information within individual users' timelines here, we do this to better aim towards depth and clarity in our methodological and empirical findings. We do not deny the potential value in investigating the contextual aspects of a users' internet presence or topical interests more generally, though exploring this further is outside of the remit of our study.

References

- Allen K, Tyler I and De Benedictis S (2014) Thinking with 'White Dee': The gender politics of 'austerity porn'. *Sociological Research Online* 19(3): 2.
- Bastos MT, Raimundo RLG and Travitzki R (2013) Gatekeeping twitter: Message diffusion in political hashtags. *Media, Culture and Society* 35(2): 260–270.
- Bingham-Hall J and Law S (2015) Connected or informed?: Local Twitter networking in a London neighbourhood. *Big Data and Society* 2(2): 1–17.
- British Psychological Society (2013) Ethics guidelines for internet-mediated research. Available at: <http://www.bps.org.uk/system/files/Public%20files/inf206-guidelines-for-internet-mediated-research.pdf> (accessed 1 March 2017).
- Brooker P, Vines J, Sutton S, et al. (2015) Debating poverty porn on Twitter: Social media as a place for everyday socio-political talk. In: *CHI '15 Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*, Seoul, South Korea, 18–23 April 2015, pp. 3177–3186. New York, NY: ACM.
- Brooker P, Barnett J and Cribbin T (2016) Doing social media analytics. *Big Data & Society* 3(2): 1–12.
- Bruner J (1991) The narrative construction of reality. *Critical Inquiry* 18(1): 1–21.
- Bruns A, Highfield T and Burgess J (2013) The Arab Spring and social media audiences: English and Arabic Twitter users and their networks. *American Behavioral Scientist* 57(7): 871–898.
- Cassidy E (2016) Social networking sites and participatory reluctance: A case study of gaydar, user resistance and interface rejection. *New Media and Society* 18(11): 2613–2628.
- Chou W-YS, Hunt Y, Folkers A, et al. (2011) Cancer survivorship in the age of YouTube and social media: A narrative analysis. *Journal of Medical Internet Research* 13(1): e7.
- Chretien KC, Tuck MG, Simon M, et al. (2015) A digital ethnography of medical students who use Twitter for professional development. *Journal of General Internal Medicine* 30(11): 1673–1680.
- Doughty M, Rowland D and Lawson S (2011) Co-viewing live TV with digital backchannel streams. In: *EuroITV '11 Proceedings of the 9th International Conference on Interactive Television*, Lisbon, Portugal, 29 June–1 July 2011, pp. 141–144. New York, NY: ACM.
- Elster J (ed.) (1998) *Deliberative Democracy*. Cambridge: Cambridge University Press.
- Foucault Welles B (2014) On minorities and outliers: The case for making Big Data small. *Big Data and Society* 1(1): 1–2.
- Freelon D, Kriplean T, Morgan J, et al. (2011) Facilitating encounters with political difference: Engaging voters with the living voters guide. In: *JITP '11 Proceedings of the Third Annual Thematic Journal of Information Technology and Politics Conference*, Seattle, WA, 16–17 May 2011, paper 5.
- Fuchs C (2013) *Social Media: A Critical Introduction*. London: Sage.
- Gehl RW (2016) Power/freedom on the dark web: A digital ethnography of the dark web social network. *New Media and Society* 18(7): 1219–1235.
- Georgakopoulou A (2014) Small stories transposition and social media: A micro-perspective on the 'Greek crisis'. *Discourse and Society* 25(4): 519–539.
- Georgakopoulou A (2017) Small stories research: A narrative paradigm for the analysis of social media. In: Sloan L and Quan-Haase A (eds) *The SAGE Handbook of Social Media Research Methods*. London: Sage Publications Ltd, pp. 266–281.
- Gonzalez-Polledo E (2016) Chronic media worlds: Social media and the problem of pain communication on Tumblr. *Social Media + Society* 2(1): 1–11.
- Graham T (2015) Everyday political talk in the internet-based public sphere. In: Coleman S and Freelon D (eds) *Handbook of Digital Politics*. Cheltenham: Edward Elgar Publishing Limited, pp. 247–263.
- Graham T and Wright S (2014) Analysing 'super-participation' in online third spaces. In: Cantijoch M, Gibson R and Ward S (eds) *Analyzing Social Media Data and Web Networks*. Basingstoke: Palgrave Macmillan UK, pp. 197–215.
- Habermas J (1991) *The Structural Transformation of the Public Sphere*. Cambridge, MA: The MIT Press.
- Hallett RE and Barber K (2014) Ethnographic research in a cyber era. *Journal of Contemporary Ethnography* 43(3): 306–330.
- Halpern D and Gibbs J (2013) Social media as a catalyst for online deliberation? Exploring the affordances of Facebook and YouTube for political expression. *Computers in Human Behavior* 29: 1159–1168.
- Hammersley M and Atkinson R (1983) *Ethnography: Principles in Practice*. London: Routledge.
- Hjorth L, Horst H, Galloway A, et al. (eds) (2017) *The Routledge Companion to Digital Ethnography*. London: Routledge.
- Holstein JA and Gubrium JF (2007) Context: Working it up, down, and across. In: Seale C, Gobo G, Gubrium JF, et al. (eds) *Qualitative Research Practice (Concise Paperback Edition)*. London: Sage Publications, pp. 267–281.
- Jackson D, Scullion R and Molesworth M (2013) 'Ooh, politics. You're brave'. Politics in everyday talk. In: Scullion R, Gerodimos R, Jackson D, et al. (eds) *The Media, Political Participation and Empowerment*. Abingdon: Routledge, pp. 205–219.
- Jensen T (2014) Welfare commonsense, poverty porn and doxosophy. *Sociological Research Online* 19(3): 3.

- Kent T (1993) *Paralogic Rhetoric: A Theory of Communicative Interaction*. Cranbury, NJ: Associated University Press.
- Koteyko N, Jaspal R and Nerlich B (2013) Climate change and 'climategate' in online reader comments: A mixed methods study. *The Geographic Journal* 179(1): 74–86.
- Kozinets RV (2010) *Netnography: Doing Ethnographic Research Online*. London: Sage Publications.
- Kulavuz-Onal D and Vásquez C (2013) Reconceptualising fieldwork in a netnography of an online community of English language teachers. *Ethnography and Education* 8(2): 224–238.
- Lawler S (2002) Narrative in social research. In: May T (ed.) *Qualitative Research in Action*. London: Sage Publications, pp. 242–258.
- McArthur JA and Farley White A (2016) Twitter chats as third places: Conceptualizing a digital gathering site. *Social Media + Society* 2(3): 1–9.
- MacDonald R, Shildrick T and Fleming A (2014) 'Benefits Street' and the myth of workless communities. *Sociological Research Online* 19(3): 1.
- Markham A (2004) Internet communication as a tool for qualitative research. In: Silverman D (ed.) *Qualitative Research: Theory, Method and Practice*. London: Sage Publications, pp. 95–124.
- Markham A and Buchanan E (2012) Ethical decision-making and internet research: Recommendations from the AOIR ethics working committee (version 2.0). Available at: <https://aoir.org/reports/ethics2.pdf> (accessed 1 March 2017).
- Markham A and Buchanan E (2015) Internet research: Ethical concerns. In: Wright JD (ed.) *International Encyclopedia of the Social and Behavioural Sciences*. Vol. 12, 2nd ed. Oxford: Elsevier, pp. 606–613.
- Markham A and Buchanan E (2017) Research ethics in context: Decision-making in digital research. In: Schäfer MT and van Es K (eds) *The Datafied Society: Studying Culture Through Data*. Amsterdam: Amsterdam University Press, pp. 201–209.
- Massanari A (2017) #Gamergate and The Fappening: How Reddit's algorithm, governance, and culture support toxic technocultures. *New Media and Society* 19(3): 329–346.
- Murthy D (2008) Digital ethnography: An examination of the use of new technologies for social research. *Sociology* 42(5): 837–855.
- Pappacharissi Z (2002) The virtual sphere: The internet as a public sphere. *New Media and Society* 4(1): 9–27.
- Pingree RJ (2009) Decision structure: A new approach to three problems in deliberation. In: Davies T and Gangadharan SP (eds) *Online Deliberation: Design, Research, and Practice*. Stanford, CA: CSLI Publications, pp. 309–316.
- Pink S, Horst H, Postill J, et al. (eds) (2016) *Digital Ethnography: Principles and Practice*. London: Sage Publications Ltd.
- Plummer K (1995) *Telling Sexual Stories: Power, Change and Social Worlds*. London: Routledge.
- Proctor R, Vis F and Voss A (2013) Reading the riots on Twitter: Methodological innovation for the analysis of Big Data. *International Journal of Social Research Methodology* 16(3): 197–214.
- Reeves S and Brown B (2016) Embeddedness and sequentiality in social media. In: *CSCW '16 proceedings of the 19th ACM conference on computer supported cooperative work and social computing*, San Francisco, CA, 27 February–2 March 2016, pp. 1052–1064. New York, NY: ACM.
- Rost M, Barkhuus L, Cramer H, et al. (2013) Representation and communication: Challenges in interpreting large scale social media datasets. In: *CSCW '13 proceedings of the 16th ACM conference on computer supported cooperative work and social computing*, San Antonio, TX, 23–27 February 2013, pp. 357–362. New York, NY: ACM.
- Semaan B, Robertson SP, Douglas S, et al. (2014) Social media supporting political deliberation across multiple public spheres: Towards depolarization. In: *CSCW '14 proceedings of the 17th ACM conference on computer supported cooperative work and social computing*, Baltimore, MD, 15–19 February 2014, pp. 1409–1421. New York, NY: ACM.
- Sharma S and Brooker P (2016) #notracist: Exploring racism denial talk on Twitter. In: Daniels J, Gregory K and McMillan-Cottom T (eds) *Digital Sociologies*. Bristol: Policy Press, pp. 463–485.
- Shirky C (2011) Political power of social media: Technology, the public sphere, and political change. *Foreign Affairs* 90: 28–41.
- Slater T (2012) The myth of "Broken Britain": Welfare reform and the production of ignorance. *Antipode* 46(4): 948–969.
- Tangherlini T, Roychowdhury V, Glenn B, et al. (2016) "Mommy blogs" and the vaccination exemption narrative: Results from a machine-learning approach for story aggregation on parenting social media sites. *JMIR Public Health and Surveillance* 2(2): 1–15.
- Vis F (2013) Twitter as a reporting tool for breaking news: Journalists tweeting the 2011 UK riots. *Digital Journalism* 1(1): 27–47.
- Vromen A, Xenos MA and Loader B (2015) Young people, social media and connective action: From organisational maintenance to everyday political talk. *Journal of Youth Studies* 18(1): 80–100.